

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Identity w.r.t intersection in a power set of any set is	A. $\emptyset$ B. Set itself C. Singleton set D. $\{0\}$
2	If $a, \beta$ are the roots of the equation $x^2 + kx + 12 = 0$ such that $a - \beta = 1$ , the value of $k$ is	A. 0 B. $\pm 1$ C. $\pm 5$ D. $\pm 7$
3	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
4	Five engineering, four mathematics, two chemistry books are placed on a table at random. The probability that the books of each kind are all together is	
5	Question Image	
6	If $0 \in R$ , then the additive inverse of $a$ is	A. $1/9$ B. $<sup>1/-9</sup>$ C. $a$ D. $-a$
7	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 1 C. Polynomial of degree 2 D. Polynomial of degree $n$
8	Question Image	
9	Which symbolic notation represent unary operation ?	A. $-$ B. $\vee$ C. $\wedge$ D. $\Leftrightarrow$
10	Question Image	
11	The mid point of the line segment joining the points $A(3,1)$ and $B(-2,-4)$ is	A. $(1, -3)$
12	The points $A(+1,-1), B(3,0), C(3,7), D(1,8)$ are vertices of	A. Square B. Parallelogram C. Rectangle D. Trapezium
13	$\sin^{-1}(\sin 2\pi/3) =$	A. $\pi/2$ B. $2\pi/3$ C. $-3\pi/2$ D. $\pi/3$
14	Two circles $x^2 + y^2 + 8x - 9 = 0$ and $x^2 + y^2 + 6y + k = 0$ touch internally if the value of $k$ is	A. $k = 9$ B. $k = \pm 9$ C. $k = -9$ D. $k = 11$
15	Question Image	
16	Question Image	A. additive property B. multiplicative property C. additive identity D. multiplicative identity
17	Question Image	
18	Question Image	A. $2x + 2y$ B. $4 - x^{<sup>2</sup>}$ C. $-x/y$ D. $x/y$
19	If $0 = \{1, 3, 5, \dots\}$ , then $n(0) =$	A. Infinite B. Even numbers C. odd integers D. $\infty$

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Question Image

- A.  $A^2 - 5A + 7I = 1$   
B.  $2A^2 - 3A + 7I = 0$   
C.  $A^2 - 5A + I = 0$   
D.  $A^2 - 5A + 7I = 0$